

I. Common Terms Used:

1. **Hardware Ready** - This means the hardware is ready (8 Meg flash card & at least 16 Meg of RAM) to have KETS compliant code applied to it.
2. **Software Maintenance** - Refers to a yearly purchase that allows a district to apply the most recent application code during the maintenance period.
Nortel Network Contract Number: BP004551
Part Number: KY2300001 **Cost:** \$208.00
3. **AN1 Router** - This is one of the old Bay Networks or Wellfleet brand routers purchased very early in the KETS implementation. During the DAS implementation one was installed in every district office. Basically, it can be identified as an AN router without a flash card in either the front or back of the unit.
4. **AN2 Router** - This is one of the new Bay Access Node routers. It is different than the AN1 in that it has a flash card accessible without opening the box, visible on the right side as you face the front of the router.
5. **ASN Router** - This is either a Bay Networks or a Wellfleet router generally used at the district hub site for multiple WAN and LAN connectivity. All of the ASN models (old and new) have a flash card accessible without opening the case. The flash card is located on the lower right side as you face the back of the router. There may be a small metal cover protecting the flash unit.
6. **Flash or Flash Card** - This is a PCMCIA card that holds the code and configuration for your router. It is like a removable hard disk storage device. These come in various sizes from 2 - 16 Megabytes of storage. The code to bring a router (AN or ASN) to KETS compliance requires 8 Meg of Flash Memory.
Nortel Networks Contract Number: BP004551
Part Number: AA0011002 **Cost:** \$510.00
7. **Code Level** - All school and district routers will need 13.20 level code to match the router level code on the state backbone and GOT.
8. **AN RAM Memory Upgrade** – This is Random Access Memory not unlike what is used in desktop PC's. The Code to bring an AN router to KETS compliance requires at least 16 Meg of RAM Memory. AN routers only have one SIMM slot.

Description: SIMM, 16MB, Parity, FPM DRAM, 4M X 36, 70 NS, 5V, 72 PIN, TIN

9. **ASN Memory Upgrade** — This is Random Access Memory not unlike what is used in desktop PC's. The Code to bring an ASN router to KETS compliance requires at least 16 Meg of RAM Memory. ASN routers have two SIMM slots.

Description: 2 each, SIMM, 8MB, Parity, FPM DRAM, 4M X 36, 70 NS, 5V, 72 PIN, TIN

II. AN1 Routers

III. If you have an AN1 router then you will need to purchase a new AN2 router. These units will not hold the 13.20 code and therefore cannot be made KETS compliant.

A. AN2 Router Hardware Options currently on the KETS price contract:

IV. Description	Part Number	Cost
Ethernet (16 Meg)	AE1001008	\$889.95
Token Ring (16 Meg)	AE1101004	\$1,144.95
Ethernet & Token Ring (16 Meg)	AE1101008	\$1,552.95

A. Installation Options currently on the KETS price contract:

1. *Option A* = Offsite configuration / shipped to you / district mounts and does cable setup. The cost is \$50.00.
2. *Option B (recommended)* = Onsite complete – the district does nothing except provide access to the facility. The cost is \$200.00.

B. Flash Card Hardware currently on the KETS price contract:

1. Remote Office Suite (8M Flash) – This gets you the flash card and the software with one year of Software Maintenance. Part Number: AE0008060The cost is 535.50.

C. Do not buy cables such as V.35 cables or Console Cables

D. Post installation actions:

1. None - this gets you the hardware, software and configuration transfer needed to bring this component into KETS compliance.

V. AN2 Router

This unit can be made KETS compliant without the purchase of a new router.

A. Pre Order / installation actions:

1. Determine the size of the flash card in your router. It is either 4Meg or 8Meg. In order to hold the 13.20 code the Flash Card will need to be an 8 Meg flash card. There are four methods you can use to determine what size flash card is in your router.

- a) Connect to the following link and locate your district using the menu system on the left hand side of the page. This will bring up a list of all the routers in your district and the current configuration information, including flash card size.

- b) **Note: This is the preferred method. Also if there are routers in the School District that are not listed here, please send an Email to the KETS Networking Team in the Global Address List**

<http://kdenet.kde.state.ky.us/router-y2k-upgrades/default.htm>

- c) Pull the flash card out of the router and look. This can be done while the router is running. It is usually stamped or printed on the flash card.

- d) Go to a workstation that has "Telnet" capabilities (i.e. Windows 95, Windows 98, etc) and complete the following steps:

(1) Login as "User" (Capital "U", lower case "ser")

(2) Type "dinfo" and hit the "Enter" key. This will tell you how much flash memory is in your router.

(3) Type "logout" and hit the "Enter" key. This will close the Telnet session.

- e) Send an E-Mail to the "KETS Y2K Router Upgrade" Exchange mailbox with the IP number for each unit. You will receive a reply with the flash card size for each IP number requested.

2. Determine the amount of RAM memory that is in your router. It is either 8, 16 or 32 Meg. In order for the router to run the 13.20 code your router will need at least 16Meg of RAM. There are three methods you can use to determine how much RAM memory is in your router.

- a) Connect to the following link and locate your district using the menu system on the left hand side of the page. This will bring up a list of all the routers in your district and the current configuration information, including memory size.

- b) **Note: This is the preferred method. Also if there are routers in the School District that are not listed here, please send an Email to the KETS Networking Team in the Global Address List**

<http://kdenet.kde.state.ky.us/router-y2k-upgrades/default.htm>

- c) Go to a workstation that has "Telnet" capabilities (i.e. Windows 95, Windows 98, etc) and complete the following steps:

- (1) Login as "User" (Capital "U", lower case "ser")
- (2) Type "tftp get 162.114.24.80 an_mem.bat" and hit the "Enter" key. This will download a "batch" file to the local router.
- (3) Type "an_mem.bat" and hit the "Enter" key. This will display the amount of RAM memory that is currently in your router.
- (4) Type "logout" and hit the "Enter" key. This will close the Telnet session.

- d) Send an E-Mail to the "KETS Y2K Router Upgrade" Exchange mailbox with the IP number for each unit. You will receive a reply with the amount of RAM Memory installed for each IP number requested.

3. Determine if you have software maintenance on each unit. If the router is less than a year old, you have maintenance (the first year of software maintenance is included in the original purchase price). If the router is more than a year old, you will need to purchase software maintenance separately.

Note: If this is the district node router KDE has already purchased the software maintenance for this router and you will not need to make this purchase

B. What to order:

Do you have an 8 Meg Flash Card?	Do you have at least 16 Meg of RAM?	Do you currently have Software Maintenance on this Router?	You Need to Order	Notes
YES	YES	YES	Nothing	Proceed to ETAC Router Service.
YES	YES	NO	Software Maintenance	See term 2 for details.
YES	NO	YES	RAM Upgrade Only	See term 8 for details.
YES	NO	NO	RAM Upgrade & Software Maintenance	See term 2 & 8 for details.
NO	YES	YES	Flash Card Only	See term 6 for details.
NO	YES	NO	Flash Card & Software Maintenance	See term 2 & 6 for details.
NO	NO	YES	Flash Card & RAM Upgrade	See term 6 & 8 for details.
NO	NO	NO	Flash Card, RAM Upgrade & Software Maintenance	See term 2, 6 & 8 for details.

VI. All ASN Routers

A. Pre Order / installation actions:

1. Determine the size of the flash card in your router. It is either 4Meg or 8Meg. In order to hold the 13.20 code the Flash Card will need to be an 8 Meg flash card. There are four methods you can use to determine what size flash card is in your router.
 - a) Connect to the following link and locate your district using the menu system on the left hand side of the page. This will bring up a list of all the routers in your district and the current configuration information, including flash card size.
 - b) **Note: This is the preferred method. Also if there are routers in the School District that are not listed here, please send an Email to the KETS Networking Team in the Global Address List**
<http://kdenet.kde.state.ky.us/router-y2k-upgrades/default.htm>
 - c) Pull the flash card out of the router and look. This can be done while the router is running. It is usually stamped or printed on the flash card.
 - d) Go to a workstation that has "Telnet" capabilities (i.e. Windows 95, Windows 98, etc) and complete the following steps:
 - (1) Login as "User" (Capital "U", lower case "ser")
 - (2) Type "dinfo" and hit the "Enter" key. This will tell you how much flash memory is in your router.
 - (3) Type "logout" and hit the "Enter" key. This will close the Telnet session.
 - e) Send an E-Mail to the "KETS Y2K Router Upgrade" Exchange mailbox with the IP number for each unit. You will receive a reply with the flash card size for each IP number requested.
2. Determine the amount of RAM memory that is in your router. It is either 8, 16 or 32 Meg. In order for the router to run the 13.20 code your router will need at least 16Meg of RAM. There are three methods you can use to determine how much RAM memory is in your router.
 - a) Connect to the following link and locate your district using the menu system on the left hand side of the page. This will bring up a list of all the routers in your district and the current configuration information, including memory size.
 - b) **Note: This is the preferred method. Also if there are routers in the School District that are not listed here, please send an Email to the KETS Networking Team in the Global Address List**
<http://kdenet.kde.state.ky.us/router-y2k-upgrades/default.htm>

- c) Go to a workstation that has "Telnet" capabilities (i.e. Windows 95, Windows 98, etc) and complete the following steps:

- (1) Login as "User" (Capital "U", lower case "ser")
- (2) Type "tftp get 162.114.24.80 asn_mem.bat" and hit the "Enter" key. This will download a "batch" file to the local router.
- (3) Type "asn_mem.bat" and hit the "Enter" key. This will display the amount of RAM memory that is currently in your router.
- (4) Type "logout" and hit the "Enter" key. This will close the Telnet session.

- d) Send an E-Mail to the "KETS Y2K Router Upgrade" Exchange mailbox with the IP number for each unit. You will receive a reply with the amount of RAM Memory installed for each IP number requested.

3. Determine if you have software maintenance on each unit. If the router is less than a year old, you have maintenance (the first year of software maintenance is included in the original purchase price). If the router is more than a year old, you will need to purchase software maintenance separately.

Note: If this is the district node router KDE has already purchased the software maintenance for this router and you will not need to make this purchase

B. What to order:

Do you have an 8 Meg Flash Card?	Do you have at least 16 Meg of RAM?	Do you currently have Software Maintenance on this Router?	You Need to Order	Notes
YES	YES	YES	Nothing	Proceed to ETAC Router Service.
YES	YES	NO	Software Maintenance	See term 2 for details.
YES	NO	YES	RAM Upgrade Only	See term 9 for details.
YES	NO	NO	RAM Upgrade & Software Maintenance	See term 2 & 9 for details.
NO	YES	YES	Flash Card Only	See term 6 for details.
NO	YES	NO	Flash Card & Software Maintenance	See term 2 & 6 for details.
NO	NO	YES	Flash Card & RAM Upgrade	See term 6 & 9 for details.
NO	NO	NO	Flash Card, RAM Upgrade & Software Maintenance	See term 2, 6 & 9 for details.

VII. ETAC Y2K Router Service

A. This is a courtesy service offered by the KETS Network Team at the ETAC (Education Technology Assistance Center) to assist districts in bringing their district and school routers into KETS compliance. The KETS Network Team has a system in place to let them know when a router has been brought up to a ready state. The system updates twice daily. Once a router is at a ready state the KETS Network Team will perform the following tasks within 2 business days.

1. Update the boot prom
2. Update the diag prom
3. Update code to 13.20 and apply your existing configuration file
4. Restart your router
5. Test Communications

B. After 2 business days you will need to verify that your router has been upgraded to the 13.20 code level. You have the final responsibility to verify that this step has been completed. If you discover that your router is not running the 13.20 code, send an E-Mail to the “KETS Y2K Router Upgrade” Exchange mailbox with the IP number for the unit. There are two methods you can use to determine if your router has been upgraded.

1. Connect to the following link and locate your district using the menu system on the left hand side of the page. This will bring up a list of all the routers in your district and the current configuration information, including software version.

a) **Note: This is the preferred method. Also if there are routers in the School District that are not listed here, please send an Email to the KETS Networking Team in the Global Address List**

<http://kdenet.kde.state.ky.us/router-y2k-upgrades/default.htm>

2. Go to a workstation that has “Telnet” capabilities (i.e. Windows 95, Windows 98, etc) and complete the following steps:

- a) Login as “User” (Capital “U”, lower case “ser”)
- b) Type “stamp” and hit the “Enter” key. This will tell you the current code level your router is running.
- c) Type “logout” and hit the “Enter” key. This will close the Telnet session.